DOCUMENT RESUME

ED 120 306 95 UD 015 889

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TITLE Determinants of Students' Interracial Behavior and Opinion Change. Working Paper No. 93, Revised.
INSTITUTION Purdue Univ., Lafayette, Ind. Inst. for the Study of Social Change.
SPONS AGENCY National Science Foundation, Washington, D.C.; Office of Education (DHEW), Washington, D.C.
BUREAU NO BR-561
PUB DATE Dec 75
GRANT NSF-GS-33357
NOTE 46p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS Behavior Patterns; Caucasian Students; *Changing Attitudes; Group Behavior; High School Students; Individual Characteristics; Intergroup Relations; Negro Students; Public Schools; *Race Relations; Racial Attitudes; Racial Differences; Secondary Education; *Social Behavior; Social Integration; Student Attitudes; *Student Behavior; *Student Opinion
IDENTIFIERS *Indiana (Indianapolis)

ABSTRACT

The relative importance of factors such as student characteristics, prior contact with the other race, opportunity for contact in the present situation, and conditions of inter-racial contact are examined in order to determine how they predict the social outcomes of inter-racial contact in high schools. Multiple regression analyses are performed which relate the total set of predictor variables to each of five dependent variables: friendly contact, friednship relations, avoidance, unfriendly contact, and opinion change. Data obtained are from both black and white students in all of the Indianapolis, Indiana public schools. Findings are consistent with previous work, which indicates that interracial hostility at the individual level may be in part a manifestation of a generally aggressive personality, and that positive prior opinions do not lead to more positive opinion change. Among the findings, which are presented in a tabular summary, are: that more early positive interracial contacts contribute to more interracial contact of any kind; that family attitudes are a somewhat more potent influence than peer attitudes among black students with the reverse for whites; and, that there is little relationship between interracial behavior and attitudes and the relative status of blacks and whites. Among whites, only the personality indicator and sex made substantial contributions to predicting unfriendly interaction with blacks. (Author/AM)

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ED120306

DETERMINANTS OF STUDENTS' INTERRACIAL BEHAVIOR AND OPINION CHANGE*

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UD015889

Working Paper #93
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Dec. 1975
(Revised)

*This study was initiated under a grant from the U.S. Office of Education (Project 561) and was continued under a grant from the National Science Foundation (GS 33357).

Abstract

This paper presents data concerning the relative importance of many factors--within the school and outside it--as predictors of the social outcomes of interracial contact in high schools. It also compares the relative impact of given predictors on different specific outcomes--avoidance, friendly behavior, unfriendly behavior and opinion change. The data were obtained from both black students and white students in all of the public high schools of Indianapolis, Indiana.

DETERMINANTS OF STUDENTS' INTERRACIAL BEHAVIOR AND OPINION CHANGE

A considerable amount of research has now accumulated concerning the social effects of racial integration in schools (see reviews by Carithers, 1970; Hofmann, 1973; Brown, 1974; St. John, 1975). While this work provides much valuable information, it has, in general, at least two major limitations.

One limitation is that the great majority of studies have concentrated almost exclusively on subjective measures as outcomes--i.e., on measures of attttude and attitude change, or on sociometric measures of interracial versus intraracial preference. Relatively little evidence has been presented concerning determinants of interracial behavior.[1] One intended contribution of this paper, based on a large-scale study of interracial contact in high schools, is to focus on several types of interracial behaviors as outcomes. These include avoidance, friendly actions, unfriendly actions, and friendship relationships.[2] We include also as an outcome a measure of opinion toward other-race people, so that the determinants of this subjective outcome may be compared to the determinants of behavioral outcomes.

A second major limitation of previous work is that in almost all cases only a small number of factors which may affect social relations between the races have been studied, in isolation from other causal factors.[3] Carithers has pointed to this problem, saying:

> "We might get closer to knowing what the process is if a study were undertaken in which each variable was examined by means of multivariate analysis. Some studies have dealt with three or four variables, but the weight of each of them--and just how they are all related--is unknown" (1970:31-32).

The present study, through the use of multivariate analyses, provides information about the relative importance of a variety of possible causal factors which have received attention in the literature. Since a number of different behavioral outcomes (plus one attitudial outcome) are examined,

we also can assess the extent to which the relative importance of given predictors differs for different outcomes.

Relation to Previous Work. A variety of factors have been discussed in the literature as affecting the outcomes of interracial contact in schools. For the purposes of this paper, we will summarize the most relevant work briefly and, in doing so, indicate the relationship of our work to that of others.

With respect to factors which may affect interracial behavior and opinions, previous work in this area may be grouped, for convenience, according to its attention to: a) characteristics of students; b) prior contact with the other race; c) opportunity for contact in the present situation; and d) conditions of interracial contact.

Characteristics of Individuals. Certain personality characteristics, it has been suggested (Cook, 1970), may dispose the individual to hostile reactions toward out-group individuals. A number of studies of children in school and other interracial settings have provided evidence that personality traits which reflect hostility or aggressiveness are, in fact, related to less positive outcomes (Mussen, 1950; Chadwick, et al., 1971). In addition to aggression deriving from personality factors, it has been suggested that those people who experience frustrations in their personal lives will be more likely to display hostility toward out-groups (Amir, 1969).

Another hypothesis advanced in the literature (Amir, 1969, Byrne 1971) proposes that interracial interaction will become more positive as the norms of members of the two groups become more similar. This hypothesis, for which there is little direct supporting evidence, implies that the members of one racial group who have characteristics most in accord with the norms of the other group will have the most positive interracial contacts.

Two additional personal characteristics whose effect on the outcomes of interracial contact have been studied are sex and initial attitude. Most

school studies have shown that girls (especially black girls) show more in-group preference than do boys (Carithers, 1970; Brown, 1973). With respect to initial attitude, Whitmore (1957) found racial attitude change unrelated to initial attitude among white students and Webster (1961) found interracial attraction among Whites unrelated to their pre-contact acceptance of Blacks. These results in school settings differ from results in housing and community studies which have frequently, though not always, shown attitudes and behavior to develop further in the direction of their initial tendency (Amir, 1969).

In the present study, we include several student characteristics which are relevant to the hypothesis that interracial interaction is affected by the individual's level of general frustration or aggressiveness. Specifically, we include measures of the student's general life satisfaction, his preference for attending another school, and his amount of unfriendly interaction with schoolmates of his own race. We also include data on several student characteristics relevent to the hypothesis that people will get along better with those in another group when the norms and behavior of the others correspond to their own. These characteristics, which reflect norms and behavior relevant to the school situation, are: a) acceptance of conventional norms of school behavior; and b) desire for further education. Finally, we examine sex and prior racial opinion as possible predictors of interracial behavior and opinion change.

Prior Contact With Other Race. There are some theoretical reasons for believing that prior contact with other-race persons--especially contact of a friendly kind--will tend to make later interracial contact more positive (Brown, 1974). Some studies have indicated that school integration in early grades facilitates the development of cross-racial friendships by white students (O'Reilly, 1969). Also, surveys of black and of white adults indicate that having attended desegregated elementary schools is associated with more

positive attitudes toward, and greater acceptance of, other-race people (Brown, 1973). However, there is little evidence regarding the extent to which early interracial contacts in grade schools, neighborhood, or elsewhere affect later interracial interaction in high schools. In one relevant study, St. John (1962) found that Whites who had more interracial contact in early grades made more cross-racial sociometric choices in high school. However, early interracial contact was not associated with greater cross-racial choices among black students.

In this paper, we examine the effects on high school behavior and opinion change of three aspects of interracial contact outside of, and primarialy prior to, the high school situation. These are: a) extent of racial homogeneity of the student's neighborhood; b) age at which the students first got to know other-race peers; and c) amount of friendly interracial contact in grade school.

Opportunity for Contact in Present Situation. Studies in housing and community settings have generally indicated that greater proximity, or opportunity for contact, between the races is associated with more friendly interaction and more positive attitudes (Harding et al.,1969; Amir, 1969, 1975). However, a number of studies in schools have found greater interracial contact in classrooms and elsewhere in school to be unrelated to attitude change (Carithers, 1970; Hofmann, 1973).

The present analysis explores this relationship further by including as possible predictors of behavior and attitude change 1) the amount of opportunity for interracial contact in the classroom and 2) the amount of participation in school activities (which often provide opportunity for interracial contact.) It also includes the amount of contact which students have had in high school with black teachers. To our knowledge, the relationship between contact with other-race teachers and interracial behavior or attitudes among students has not been examined before.

Conditions of Contact. A number of writers concerned with inter-group relationships have pointed out that the social effects of inter-group contact may depend on the conditions under which the contact takes place (e.g., Cook, 1970; Amir, 1975). In particular, such conditions as equality of status, common goals, and favorable norms by peers and authority figures have been hypothesized to be important. In studies of interracial contact in community, housing, and job settings, such conditions of contact have received attention, though their effect has not always been clearly demonstrated. However, as Carithers points out in her review, relatively little attention has been given to the conditions of interracial contact in schools (1970:41-42).

With respect to the relative status of interacting groups, there is some evidence that equality of status between reces in community settings contributes to more positive behavior and attitudes (Amir, 1969, 1975). However, in view of the widespread assertion of the "equal-status contact principle," the direct evidence is surprisingly limited. There are also some negative findings (Harding and Hogrefe, 1952; Amir, et al., 1973) concerning situations where equal-status contact did not lead to more positive attitudes or behavior. In school settings, very little evidence on the effect of status differences exists. One relevant study by Willie (1973) found that black students of the very lowest socio-economic status assimilated least well socially with white schoolmates,but the overall effect of (relative)SES was not large in that study. In the present analyses, we provide evidence concerning the impact of relative status by examining the effects both of students' relative socioeconomic status and of their relative status within the school situation.

With respect to the effect of social norms, there is some evidence that student attitudes and behavior tend to be consistent with the racial attitudes of their families and their peers (Chadwick, 1972; Campbell, 1958; Sartain, 1966). These data are consistent with data from non-school settings but, in both school and non-school settings, the measures of social norms have almost always been

measures of perceived norms rather than objective measures of such norms.[4] In the present analysis, we include as possible predictors objective measures of the racial attitudes of students' same-race peers and other-race peers.

With respect to common goals, there is considerable experimental evidence which indicates that cooperation is more likely when individuals' goals are compatiable and that people will like better those who facilitate rather than interfere with their goal attainment (Hofmann, 1973). Direct evidence concerning the effect of variations in goal compatibility in inter-group relations is more limited. The Sherifs' well-known studies showed dramatically the possible beneficial impact of "superordinate goals" on intergroup relations. In school studies, little evidence exists. Kupferer (1954) reports that participation in interracial class sports activities did not improve the sociometric status of Blacks among white schoolmates. In the present study, we include among possible predictors of interracial behavior and opinion change a measure bearing on the presence of common goals. Specifically, this measure concerns the extent of student participation in inter-racial sub-groups or teams within classes.

In addition to our objective measures of relative status, peer norms, and common goals, we obtained data concerning students' perceptions of these conditions of interracial contact. While we will focus primarily on the objective measures of the conditions of contact, we will report briefly also on results for the supplementary perceptual measures.

It is clear by now that the present study will include a variety of possible predictors of interracial behavior and opinion change.[5] These predictor variables have been selected because, as indicated, previous research shows that they may affect outcomes in interracial situations and/or because they have been hypothesized in the literature to have such effects. In view of the lack of well-developed general theory in this area, we do not attempt to test any general theory concerning interracial interaction. Our results do provide information about the relative importance of a number of hypothesized determinants

of the social outcomes of racial integration when the effects of each are examined independently of the effects of the others. Our data set--which covers both many possible causal factors and a number of different behavioral and attitudinal outcomes--is unusually well suited to this purpose. The results also have practical implications for efforts at promoting successful racial integration in the schools. We will consider briefly some of these implications at the close of the study.

METHODS

Data Collection. The data were gathered in all of the public high schools in Indianapolis, Indiana. Data were collected during the 1970-71 school year at eleven school sites. These school sites ranged from 1 percent black to 71 percent black in the composition of their student bodies, with the median black enrollment being 36 percent. Data are reported for black students in all schools but data from white students in schools having few Blacks (one entire school and the Sophomore, Junior, and Senior classes of a second school) are omitted because these Whites experienced little interracial contact.

Early in the 1970-71 school year, informal interviews were conducted with black students, with white students, with teachers of both races, and with the principals in each school. On the basis of the information obtained from this preliminary work, as well as from previous research, we constructed a two-part questionnaire to assess primarily interracial interaction and a variety of factors to which such interaction might be related.

In each class (Freshman, Sophomore, etc.) of each school, a sample of about 60 black students and 60 white students was selected systematically from enrollment lists. When there were fewer than 60 students of a given race in a given class, all of the students in that category were included in the sample. Questionnaires were administered in the Spring of 1971 to students in group sessions in a large room at each school. Separate forms were given to black students and to white students (identified visually); these forms were essentially identical except that the terms "black" and "white" were transposed to fit the appropriate

case. The questionnaires were administered by the investigators and their assistant(s)--comprising a bi-racial "team"--and students were assured that their answers would be completely confidential.

Of the total number of black students selected in the sample, 75.1 percent (N=1,986) acceptably completed Part I of the questionnaire, 74.4 percent (N=1,969 acceptably completed Part II, and 66.9 percent (N=1,769) acceptably completed both parts. Among white students, the comparable rates and numbers for acceptable completion are: Part I, 82.8 percent (N=2,347); Part II, 80.9 (N=2,292); both parts, 75.7 percent (N=2,146).[6]

Data also were obtained from school records. Of data from this source, those on students' grades will be used in the present paper.

Measures. Almost all of the measures presented in this paper are based on data from the student questionnaires. Detailed descriptions of these measures are presented elsewhere (Patchen and Davidson, 1973). Here we present only a very brief description of the kind of data on which each measure is based.

A. Interracial Interaction

1. Avoidance. Average frequency with which student reported avoiding other-race students in seven different situations (e.g., avoided sitting near such persons, didn't go to party because other-race persons included).
2. Friendly Contact. Average frequency with which student reported each of nine types of friendly interaction--e.g., did school work together, did things together outside of school (items weighted by intimacy of contact).
3. Friendship Relations. A Guttman scale based on two items concerning the number of other-race friends and one item concerning whether the student is a member of an informal group which is interracial.

4. Unfriendly Contact. Average frequency with which the student reported getting into physical fights (two items) or into arguments (one item) with other-race schoolmates.

B. Change in Opinion of Other-Race People. "Since coming to this school, has your opinion of most (other-race) people gotten worse, gotten better, or stayed the same?" (five alternatives, from "gotten much better" to "gotten a lot worse").

C. Student Characteristics

1. Prior opinion. "In general, what was your opinion of most (other-race) people just before you came to this high school?" (five alternatives, from "good" to "not good at all").

2. Endorsement of Conventional Norms. Number of times student made conventional response to seven items concerning whether students should behave in various ways in school (e.g., obey all school rules whether they agree with them or not, use swear words if they feel like it).

3. Sex. Student self-report, confirmed by school records.

4. Educational Aspiration. "How far would you like to go in school?" (six alternatives).

5. Unfriendly Contacts with Same Race. Average frequency with which student reported getting into physical fights or into arguments with same-race schoolmates (three items).

6. Satisfaction with Life. Average degree of satisfaction with three aspects of his school life (e.g., the courses he is taking) and six other aspects of life (e.g., the way things are at home).

7. Preference for Other High School. "How did you feel about coming to this particular high school just before you came here?" (Response

categories indicate preference for this versus another school).

D. Interracial Contact Outside High School

1. Neighborhood Segregation. "About how many (other-race) families live within two blocks of your home now?"
2. Age of Acquaintance. "How old were you when you first got to know any (other-race) kid(s) pretty well?
3. Friendly Grade School Contact. Number of other-race people student indicates he had "gotten to know" at grade school, weighted by the reported friendliness of the "kind of experiences (if any) you have usually had with (other-race) people there".

E. Opportunity for Interracial Contact in High School

1. In-Class Contact. Number of classes during the then-current semester in which student reports having "a seat or work place right next to one or more (other-race) students."
2. Contact with Black Faculty. Number of black teachers, plus number of other black faculty (counselor, coach, sponsor of activity) that student had during high school. (Asked of both races)
3. Number of School Activities. Participation in any athletic team, musical group, school publication, club, or other extra-curricular activity in present school.

F. Conditions of Contact

1. Ethnocentrism of Same-Race Peers. For each student, we computed the average score of those in the same school class, of the same race, and of the same sex on a six-item measure of racial ethnocentrism.
2. Ethnocentrism of Other-Race Peers. This measure parallels the one above.

3. Family Racial Attitudes is the mean score on two items concerning student's perceptions of how his family a) "seem to feel about (other-race) people (from "like very few" to "like almost all") and b) "feel about how friendly (same-race) students should act toward (other-race) students" (from "should act as friendly" to "should not have much to do with").

4. Relative Socio-Economic Status (SES) is the difference between each student's score on a measure of SES (based both on parents' education and on parents' occupations) and the average SES score of other-race students in his same school class (e.g., freshmen at School 1).

5. Relative Grades is the difference between each student's mean grade average (over his high school career) and the mean grade average of other-race students in the same school class.

6. Division of Classes Into Interracial Groups is based on the student's report about the number of classes this semester which have "ever been divided into teams or small groups of students who work together" and about the number of such sub-groups, in which he has participated which have included other-race students.

We wished, in these analyses, to focus on actual conditions of interracial contact, rather than on students' perceptions of such conditions. It will be noted that five of the six measures listed above are relatively objective. The exception is the measure of family attitudes, which reflects student perceptions of such attitudes. This measure was included because a) we believed that family racial attitudes may have a strong effect on interracial behavior; b) no more objective measure was available to us; and c) some evidence suggests that student reports about family attitudes are reasonably accurate (Kerckhoff and Huff, 1974).

Method of Analysis. For white students and for black students separately, multiple regression analyses were performed which related the total set of predictor variables to each of five dependent variables: friendly contact, friendship relations, avoidance, unfriendly contact, and opinion change. Thus, a total of ten regression analyses were performed.

Multiple regression analysis makes the assumptions that all relationships are linear and additive. We have not checked these assumptions fully because the task of investigating all possible non-linearities of relationship and all possible interactions (for 19 predictors and 5 dependent variables) is a large undertaking that is beyond our present resources.

We have, however, examined the form of many relationships suspected of being non-linear and have looked for interactions in many cases where we suspected its presence (see, for example, Brown, 1974). The deviations from linearity and additivity are not large.

It should be noted also that the relative contribution of each predictor in a multiple regression analysis may be influenced by the size of its variance and by possible multicolinearity (high correlations with other predictors). While the variances of predictors (relative to their respective ranges) differ somewhat, the fact that our large sample includes students from many schools and many backgrounds results in substantial variances for all of our predictors. With respect to possible multicolinearity, variables were selected so as to eliminate any high intercorrelations among predictors;[6A] thus, this is not a serious problem. Moreover, while the Betas are affected somewhat by differences in the amount of shared variance among predictors, the rs are not so affected.

Overall, then, while our results are subject to the limitations of almost any multiple regression analysis, we believe that they provide reasonable approximations of the relative strength of the various predictors. As indicated above, such information concerning the relative strength of many diverse predictors has been rare in the literature on school integration.

FINDINGS

The results of our multiple regression analyses are shown in Tables 1, 2 and 3. (For an overview of the results, see Table 4). Each table shows, separately for black students and for white students, the correlations (rs) and the partial Beta coefficients (Bs). The rs indicate the total association between each predictor and each dependent variable (including any indirect, joint, and spurious effects) while the partial Bs indicate the independent (direct) effect of each predictor when other variables are controlled. Since we wish to keep a necessarily long

presentation within reasonable limits, and since the rs and the Bs tend to vary together, our presentation of the results will focus primarily, though not exclusively, on the Bs.

Avoidance. Among students of both races, two personal characteristics are relatively good predictors of interracial avoidance (see Table 1A).

[Insert Table 1 about here]

The more generally aggressive the student (i.e., the more often he reported unfriendly interaction with schoolmates of his own race) the more often he reported avoiding schoolmates of the other race. Secondly, the less positive the student's opinion of other-race people prior to high school, the more often he avoided other-race schoolmates.

Among Whites, but not among Blacks, the student's sex helps to predict avoidance. White boys were more likely than white girls to try to avoid Black schoolmates.

There is only weak evidence of interracial avoidance being related to personal frustrations among students. Our measure of overall satisfaction with life does not help significantly to predict avoidance among students of either race. Attending a school for which one had less preference makes a significant, but small, contribution to greater interracial avoidance among white students.

There also is little evidence that having conventional values or aspirations has much effect on interracial avoidance. Among black students, endorsement of conventional norms of school behavior does have a relatively substantial correlation (-.23) with lesser avoidance of white schoolmates. But when other predictors are controlled in the regression analysis, neither acceptance of conventional norms nor high educational aspirations has a significant effect on avoidance by students of either race.

The interracial contacts which students reported outside of high school also had little association with interracial avoidance. For both black students and white students, neither age of first interracial acquaintance, nor amount of friendly grade school contacts, nor degree of neighborhood racial segregation makes a significant contribution to predicting avoidance. Moreover, our indicators of opportunity for interracial contact within high school--i.e., in-class contact, number of activities, and contact with black faculty--also do not help significantly to predict interracial avoidance.

There are, however, several conditions of interracial contact which appear to affect avoidance. The most important of these is the (reported) racial attitudes of the student's family. Among students of both races, the more positive the family racial attitudes, the less the avoidance. For both black and white students, too, more positive racial opinions among (same-race) school peers contributes to less interracial avoidance.

Other conditions of interracial contact--relative status, racial attitudes of other-race schoolmates, and number of interracial subgroups within classes--do not help to predict interracial avoidance.[7]

Of the total set of nineteen possible predictors, the best predictors[8] of greater interracial avoidance by black students are: 1) more unfriendly interaction with same-race schoolmates; 2) less positive racial attitudes of family; 3) less positive opinion of other-race people prior to high school; and 4) greater racial ethnocentrism among same-race schoolmates. Among white students, the same four variables (in somewhat different order of strength), plus being male, are the best predictors of avoidance. The total set of predictors accounts for 23 percent of the variance in avoidance among Blacks and for 19 percent of the variance among Whites.

Unfriendly Interaction. Next we consider the data bearing on unfriendly interaction with other-race schoolmates (see Table 1B). For students of both races, unfriendly interaction is related most strongly to several personal characteristics of students. By far the best predictor of unfriendly interaction with the other-race is unfriendly interaction with schoolmates of one's own race (i.e., our measure of general aggressiveness). For both Blacks and Whites, too, being male and having had a less positive opinion of other-race people prior to high school contribute to more unfriendly contacts across racial lines.

Among Whites, acceptance of conventional norms of school behavior contributes slightly to less unfriendly interracial contact. Acceptance of conventional norms does not affect the amount of unfriendly contact reported by black students. Also, educational aspirations do not help to predict unfriendly interracial contact for either race.

In general, personal frustration does not appear to be much related to unfriendly interaction. Among white students, lesser preference for one's present high school (prior to attending) contributes slightly to more unfriendly interaction with Blacks, but greater dissatisfaction with life does not help to predict more unfriendly contact for students of either race. In fact, among black students, unfriendly interaction with Whites increases slightly as students express greater satisfaction with their lives.

More interracial contact outside of high school tends to be related to more unfriendly interracial contact, but the effects are very small. Among both races, living in more segregated neighborhoods contributes slightly to fewer unfriendly interracial contacts and, for Whites, getting to know black people at a later age also contributes slightly to fewer unfriendly contacts with black schoolmates in high school. The amount of friendly interracial contact in grade school does not seem to affect the amount of unfriendly interaction in high school. Similarly,

opportunity for interracial contact in high school does not appear to affect the amount of unfriendly interaction which students have.

However, two conditions of interracial contact affect the unfriendly contacts of black students (though not those of Whites). More negative attitudes by family and more ethnocentric attitudes by other-race schoolmates contribute to more unfriendly interactions among Blacks.

Among students of both races, unfriendly interaction is not affected significantly by other conditions of contact--i.e., by either of our measures of relative status, by the racial ethnocentrism of same-race peers, or by participation in classroom interracial subgroups.[9]

Of the total set of variables considered, the best predictors of unfriendly interracial contact among black students are: 1) unfriendly interaction with same-race schoolmates; 2) less positive opinion of Whites prior to high school; and 3) less positive racial attitudes by family.

Among white students the only fairly strong predictors of unfriendly interaction with black schoolmates are: 1) unfriendly interaction with schoolmates of one's own race; and 2) being male.

Our total set of predictors accounts for 21 percent of the variance in unfriendly interracial contacts among black students and for 27 percent of the variance among white students.

Friendly Interaction. The results concerning friendly interracial contact and interracial friendship are generally similar and we will consider them together (see Table 2).[10]

[Insert Table 2 about here]

For students of both races, greater opportunity for interracial contact in their high school classrooms makes relatively large contributions both to friendly interracial contact and to interracial friendship. Greater participation in school activities also helps to predict both 'friendly' outcomes. However, greater

opportunity for contact with black faculty does not affect the frequency of friendly contact with other-race schoolmates.

More interracial contact prior to high school also contributes to more friendly interaction in high school. In particular, for both races, more friendly interracial contact in grade school contributes both to friendly contact and to friendship in high school. Earlier age of acquaintance with other-race people and less segregated neighborhoods also tend to be related to more friendly interaction in high school.

Several conditions of interracial contact in the high school also affect the amount of friendly interaction which students experience. Among students of both races, but especially among Blacks, more positive family racial attitudes help to predict more friendly interaction. Among white students, peer attitudes as well as family attitudes are important; interracial friendship and especially friendly interracial contact decline as the racial ethnocentrism of same-race peers increases. Among black students, however, friendly interracial interaction is <u>not</u> related to the level of ethnocentrism among black peers.[11]

With respect to other conditions of contact, among black students (but not among Whites) participation in interracial subgroups in classes makes small contributions to more friendly interracial interaction. However, neither measure of the student's status relative to other-race schoolmates helps to predict friendly interaction for students of either race. Nor is friendly interracial interaction, for either race, affected by the average level of racial ethnocentrism among other-race schoolmates.[12]

Looking at the effects of various personal characteristics of students, we note first that more positive opinion of other-race people prior to high school contributes significantly to more friendly interracial interaction (on one or both measures). Our measure of general aggressiveness (i.e., amount of <u>unfriendly</u>

interaction with same race peers) makes, surprisingly, a contribution to predicting more friendly interracial contact (though not friendship) for students of both races.

There is some evidence that, among black students, more conventional, school-oriented attitudes (i.e., acceptance of conventional school norms and higher educational aspirations) help somewhat to predict more interracial friendship. However, such attitudes do not contribute to the amount of friendly interracial contact among students of either race.

There is only very slight evidence that personal frustration affects the amount of friendly interracial interaction. Among black students, greater general satisfaction with life helps slightly to predict friendly contact, but not friendship. Among Whites, general satisfaction does not contribute to friendly interaction across racial lines. Among students of both races, lesser preference for one's present high school (prior to coming) is not much related to friendly interaction with the other race. Finally, friendly interaction across racial lines is not related appreciably to the student's sex.

Of the total set of variables considered, the best predictors of friendly interracial interaction among black students (on one or both measures) are: 1) more participation in school activities; 2) more opportunity for interracial contact in classes; 3) more positive family racial attitudes; 4) more positive opinions of the other race prior to high school; and 5) earlier age of first acquaintance with Whites.

The best predictors of friendly interracial interaction among Whites (on one or both measures) include the same first four variables listed above for Blacks, plus 5) less racial ethnocentrism among same-race schoolmates; 6) more friendly interracial contact in grade school; and 7) more unfriendly interaction with same-race schoolmates.

The total set of predictors accounts for 24 percent of the variance in friendly contacts among Blacks and for 30 percent of the variance among Whites. The same set of predictors accounts for 19 percent of the variance in interracial friendship among Blacks and for 21 percent of the variance among Whites.

Change in Opinion. Finally, we look at our results concerning change in opinion of other-race people since coming to high school (see Table 3). Opinion change is related relatively strongly to two conditions of interracial contact. For students of both races, a positive racial attitude by the student's family is the best predictor of positive opinion change. Less ethnocentrism among same-race schoolmates also contributes to more positive opinion change; this effect is especially strong among white students.

[Insert Table 3 about here]

For white students, opinion change is somewhat less positive as the student's SES, relative to black schoolmates, becomes higher. Relative SES does not affect opinion change among Blacks. Our other measure of relative status--relative grades--does not contribute to predicting opinion change among students of either race. Nor does the average ethnocentrism of other-race schoolmates, or participation in classroom interracial subgroups, contribute to opinion change.[13]

In addition to the several conditions of contact mentioned, a number of student characteristics are related to opinion change. Among students of both races, and especially among Blacks, acceptance of conventional norms of school behavior contributes to positive change in opinion of othe other race. Among Blacks (but not among Whites), greater personal satisfaction (as indicated by overall satisfaction and preference for present high school) also seems to contribute to more positive opinion change. Among Whites, opinion of black people changed for the better as students had less positive racial opinions prior to high school and (more weakly) as students had more unfriendly contacts with schoolmates of their own race.

With respect to interracial contact outside high school, there is some indication that among Whites, less opportunity for such contact contributes to more positive change during high school. Among Whites, opinion change became somewhat more positive as the segregation of students' neighborhoods increased. This was not true for black students. For students of both races, neither age of first interracial acquaintance nor amount of friendly interracial contact in grade school appears to affect opinion change during high school.

Greater opportunity for interracial contact in high school classes contributes to more positive opinion change among white students but not among Blacks. Other indicators of opportunity for interracial contact in high school--participation in school activities and amount of contact with black faculty--do not affect opinion change.

Of our total set, the only variables which are fairly good predictors of favorable change in racial opinion among black students are 1) greater acceptance of conventional school norms; and 2) greater general satisfaction with life. Among white students, the best predictors of favorable change in opinion are: 1) less positive opinion of black people prior to high school; 2) less ethnocentrism among white schoolmates; and 3) more opportunity for contact with black schoolmates in classes.

The total amount of variance in opinion change which is accounted for by our total set of predictors is small--14 percent among Blacks and 11 percent among Whites.[14]

Overview of Results. We have presented an extensive set of results. To aid the reader in getting an overview of the highlights of these results, we present Table 4. This summary table shows the variables which are the best predictors of each type of interracial behavior, and of opinion change, among students of each race. Thus, the reader can easily compare the variables which are the

best predictors of one type of outcome with those which are the best predictors of each other outcome, for students of each race.

[Insert Table 4 about here]

CONCLUSIONS

In discussing the results, we may consider first the ways in which our findings concerning possible determinants of race relations are related to previous work.

Personal Characteristics. Our results are consistent with previous work which indicates that interracial hostility at the individual level may be, in part, a manifestation of a generally aggressive personality. The results indicate that general aggressiveness (as indicated by fighting within one's ingroup) is the best predictor of unfriendly behavior toward other-race schoolmates, and is also a relatively good predictor of interracial avoidance. (The results suggest also that aggressive students have a generally higher interaction level, since they report somewhat more friendly cross-racial contacts than do others.) While aggressive interpersonal style has a strong association with (negative) behavior, the data suggest that general personal frustration has only a small effect on interracial behavior. General personal frustration does make some contribution to less positive opinion change among black students.

Consistent with several previous school studies, our results indicate that positive prior opinions do not lead to more positive opinion change; in fact, more negative racial opinions prior to high school predict more positive opinion change among Whites during high school. The less positive opinion change among those who began with relatively positive opinions may be due, in part, to the fact that these students had less "room" to move in a still more positive direction (the "ceiling effect"). It may be also that those with less positive initial opinions had lower expectations of Blacks. Thus, they may have

reacted favorably to the pleasant behavior of many Blacks, while those with good initial opinions, and higher initial expectations, may have been disappointed by the behavior of some Blacks of which they disapproved.

However, while positive initial opinion does not contribute to positive opinion change, it does contribute to more positive, and less negative, interracial behavior among students of both races. These results indicate that the behavioral consequences of prior racial opinion need to be sharply distinguished from its consequences for opinion change.

While previous studies have indicated greater in-group preference among girls, especially black girls, we find (despite a tendency in the predicted direction among Blacks),[15] no significant sex effect on friendly interracial contacts. Our finding that boys have more unfriendly interracial contacts undoubtedly reflects the general cultural pattern for boys to engage more in physical fighting. Our further finding that white boys are more apt than white girls to avoid black schoolmates is due at least in part, we think, to the greater fear of physical attack which white boys report (Patchen, Hofmann, and Davidson, 1974). In general, our results go counter to the suggestions of some previous writers that racial integration goes more smoothly among boys than among girls.

Among Blacks, expressed acceptance of conventional norms and high educational aspirations contribute (modestly) to more friendship with Whites. If one considers only verbal expressions of norms and values, these results cannot be used as support for the idea that more similar values will lead to better intergroup relations. This is because the expressed values of all Blacks and all Whites with regard to conventional behavior and educational aspirations are, on the average, very similar in this set of schools. There is, however, some evidence that the behavior of Whites in these schools tends to be more

conventional and more oriented to higher education than does that of Blacks (Patchen, Hofmann, and Davidson, 1974). Since Blacks who endorse conventional norms most strongly and who indicate the highest aspirations are more likely than other Blacks to behave in consistent ways (e.g., not getting into fights, being on time to classes), it seems likely that their behaviorally-expressed norms and values are most similar to those of the average white student . These results, then, tend to support the norm and value-similarity hypothesis - but with the important proviso that it appears to be behavioral, rather than verbal, expression of norms which is most important.

Prior Interracial Contact. Our results provide evidence that more early interracial contacts, especially those of a positive kind, contribute to more interracial contacts of any kind, but especially to more positive contact, in high school. The positive effects of friendly grade school experiences, and of less segregated neighborhoods, are found only among white students. In this respect, the results parallel St. John's finding that cross-racial contacts in grade school lead to more favorable interracial attitudes among Whites but not among Blacks.[16] However, among black students, getting to know whites at a relatively early age does contribute to more friendly interracial contacts in high school.

Overall, these results add direct evidence of the possible beneficial effects of early interracial contacts on high school race relations to the previous work showing positive effects of grade school integration on grade school friendships and on adult attitudes.

Opportunity for Contact. Our results indicate that, for students of both races, more opportunity for interracial contact in classrooms. as well as more participation in activities, contributes substantially to more friendly interaction with other-race schoolmates, while not affecting the level of avoidance or of unfriendly interaction. Greater opportunity for interracial contact in classes also contributes somewhat to more positive attitude change among Whites,

though not among Blacks. These results generally contrast with the school studies which have found no associations between contact opportunity and attitude change but they are consistent with most results from community, housing, and work settings. Other results from our study, reported elsewhere, (Patchen, 1975) show that change in opinion toward other-race schoolmates is related much more to the nature of the interaction experienced (positive or negative) than to sheer opportunity for contact. Thus, the most salient question to ask about opportunity for contact is: What effect does it have on interaction patterns? Although the answer to this question undoubtedly depends on the conditions of contact, the present results indicate that--at least under the conditions in one large school system--greater contact opportunity generally resulted in more positive interaction patterns.

Our results also indicate, however, that more contact with black faculty members had little impact on the interracial behavior or attitudes of students of either race. This result, as it concern white students, contrasts with some previous evidence that contact with high-status members of another racial group results in positive change in attitudes toward that group (Amir, 1969). It may be that, although acquaintance with black teachers would tend to shatter conventional stereotypes which Whites hold of Blacks, the authority relationship between teachers and students inhibits positive attitude change.

Conditions of Contact. Our results bearing on the racial attitudes of family and peers provide additional evidence consistent with many previous studies that have indicated such attitudes to be important influences on behavior. They also provide evidence on some related points on which there is much less data. First, these results suggest that family attitudes are a somewhat more potent influence than peer attitudes among black students while the reverse tends to be true among Whites. It is interesting that despite greater "instability" among

black families (Udry, 1970), black families appear to have relatively strong influence on their children's interracial behavior and attitudes.

Secondly, the fact that both interracial behaviors and opinion change are related to the racial attitudes of family and peers indicates that the attitudes of relevant others affect both overt behavior and private attitudes. Third, the results based on an objective measure of peer attitudes provides evidence that the interracial behavior and attitudes of students are related to the actual attitudes of peers and not merely to perceptions of such attitudes. Our results indicate also that while the racial attitudes of schoolmates of the other race may have some effect on students' interracial behavior, this effect is much less than the effect of the racial attitudes of schoolmates of the same race.

Our data bearing directly on the extent to which interracial contact facilitates goal attainment are limited, especially with respect to objective measures. However, unlike those of Kupferer, the results provide some support for the general proposition that those of different groups will get along best in circumstances where they aid, rather than hinder, each other in pursuit of important goals. Results showing participation in school activities makes a strong contribution to friendly interracial contact also are consistent with this proporition since many activities involve interracial cooperation toward common goals.

Probably our most interesting findings concerning conditions of contact are those which show little relationship between interracial behavior and attitudes and the relative status of Blacks and Whites. There is an indication that greater perceived difference in economic status is associated with more interracial avoidance by Whites. However, in general, the results--especially those based on objective data--indicate that the status of a student, relative to the average schoolmate of the other race, has very little effect on his interracial behavior and attitudes. In view of the frequent statement that "equal-status contact" is

necessary for favorable outcomes, these results are striking, and seem to call from re-examination of the equal-status "principle" and its supporting evidence.[17]

The Dependent Variables. Having considered the data from the standpoint of the predictor variables, we may consider briefly the results from the perspective of the dependent variables. What general conclusions do the data suggest about the determinants of various types of interracial behavior?

Our results suggest, first, that interracial avoidance by individuals in high school is primarily a reflection of the student's initial attitude and personality and of the attitudes of important others (family and peers). Avoidance has little to do with interracial contact, either past or present.

The same generalization appears to hold in part also for unfriendly interracial contact. This is true especially for black students, among whom the strongest predictors of unfriendly interaction with Whites are unfriendly interaction within one's own racial group (our personality indicator), own racial attitude prior to high school, and family racial attitude. However, the fact that higher racial ethnocentrism among white schoolmates also contributes to unfriendly interaction among Blacks indicates that black unfriendliness is in part a reaction to the behavior of Whites and not entirely a result of personality and of attitudes brought from outside school.

Among white students, only the personality indicator (unfriendly interaction with same-race peers) and sex made substantial contributions to predicting unfriendly interaction with Blacks. Evidence presented elsewhere (Patchen and Davidson, 1973) indicates that white students were rarely the initiators of overt unfriendly interaction with Blacks. Thus, whatever hostile dispositions Whites had toward Blacks, due to own prior attitudes, to racial attitudes of peers and family, or to interracial contacts, may not have been translated often into unfriendly action.

Like avoidance and unfriendly interaction, friendly interaction with other-race schoolmates is affected by students' initial racial attitudes and by the racial attitudes of family and peers. But friendly interaction also increased substantially as students had more opportunity for interracial contact, both prior to and in high school. In part, especially among white students, more interracial contact probably affected interracial friendliness through changing students' general racial opinions in a positive direction. But the data indicate that, especially among black students, greater interracial contact was not related much to opinion change. Thus, it appears that interracial contact does not have to lead to generalized attitude change in order for friendly interaction to occur. It seems likely that proximity to other-race schoolmates will lead directly, partly through the force of circumstances (e.g., need for a homework assignment), to friendly contact with specific individuals, perhaps with those who "seem nice". Such friendly contacts, begun almost by chance and repeated because satisfying, may then lead to more positive attitudes toward other-race people in general, as data presented elsewhere indicates (Patchen, 1975).

Policy Implications. Finally, we may consider the implications of the results for social policy bearing on racial integration in the schools. The results indicate the importance of several factors which have their origin primarily outside of the school. One of these is the generally aggressive interpersonal style of some students, a strong contributor to negative interracial behavior. Short of radical changes in our culture and childrearing practices, there is probably little that can be done to change such basic personality traits--especially by the time of high school. However, schools may be able to inhibit the expression of aggressive tendencies. One approach is to try to reduce the occurrence of frustration-producing situations (e.g., long lunch lines for short lunch periods). In addition, a combination of penalty for aggressive behavior and reward for constructive behavior may be expected to reduce aggression among students who come to school with generally aggressive patterns of behavior (Bandura 1973).

Other important influences deriving largely from outside the high school are the student's prior racial attitude, the racial attitudes of his family, and the racial ethnocentrism of the student's school peers. (The latter factor, though manifest within the high school, undoubtedly derives largely from the community.) In view of the importance of these racial attitudes and norms brought from "outside" the school, it may sometimes be necessary for the school to drop the frequent policy of ignoring the subject of race and, instead, to attempt directly to change negative racial attitudes and norms. Such individual and shared racial attitudes are more susceptible to change than are basic personality traits like aggressiveness (see, e.g., Sherif and Sherif, 1969). Possible mechanisms for such change include the formal curriculum, interracial discussion groups, and the expressed racial attitudes and example of teachers.[18]

However, the most promising levers for improving interracial interaction--especially friendly interaction--appear to lie in policies aimed at increasing interracial contact. Our results suggest, first, that interracial friendliness in high school will be fostered by policies which encourage friendly interracial contact at early ages in grade schools and neighborhoods. Secondly, the results suggest that interracial friendliness in high school may be fostered by increasing opportunities for interracial contact in classes and in school activities. Our data, consistent with those of others, indicates that such contact is most likely to have positive results if it takes place under conditions of compatible goals and favorable social norms. Our data also indicate, however, that equality of status between the student and schoolmates of another race does <u>not</u> seem to be necessary for favorable outcomes to occur.

Table 1. Negative Interracial Behavior, as Related to Characteristics of Students and to Amount and Conditions of Interracial Contact[a]

Characteristics of Students	A. Avoidance				B. Unfriendly Interaction			
	Blacks		Whites		Blacks		Whites	
	r	Partial Beta	r	Partial Beta	r	Partial Beta	r	Partial Beta
1. Positive opinion of other race prior to high school	-.24	-.11**	-.30	-.17***	-.17	-.14***	-.16	-.08*
2. Endorsement of conventional school behavior	-.23	-.06	-.12	-.02	-.16	-.03	-.20	-.07*
3. Sex (high score=female)	-.11	-.02	-.20	-.11**	-.20	-.09*	-.31	-.15***
4. Educational Aspirations	-.07	.00	-.06	-.02	-.05	-.01	-.07	-.04
5. Unfriendly contacts with same-race students	.29	.24***	.21	.15***	.37	.31***	.45	.37***
6. Satisfaction with life	-.07	.01	-.08	.00	.04	.08*	-.11	.00
7. Prior preference for other school	.11	.05	.12	.07*	.04	-.01	.09	.06*
Contact with Other Race Outside High School								
1. Segregation of Neighborhood	.01	-.03	.04	-.03	-.04	-.07*	-.05	-.07*
2. Age of first acquaintance with other-race kids	.08	.00	.09	.01	-.01	-.06	-.06	-.07*
3. Friendly interracial contacts in grade school	-.16	-.06	-.13	-.02	-.04	.01	-.04	-.03

[a]Ns on which rs (Pearsonian correlations) are based vary somewhat depending on the number of invalid scores for each variable. The average N is about 1550 for Blacks and about 1750 for Whites. With Ns of about this size, correlations of .06 are significant at .05 level, .08 significant at .01 level, .09 at .001 level.

*Indicates Beta significant at .05 level; **indicates Beta significant at .01 level; ***indicates Beta significant at .001 level.

Table 1 (continued)

Opportunity for Contact in High School	A. Avoidance				B. Unfriendly Interaction			
	Blacks		Whites		Blacks		Whites	
	r	Partial Beta	r	Partial Beta	r	Partial Beta	r	Partial Beta
1. Opportunity for interracial contact in classes	-.04	-.01	-.09	-.04	-.05	.00	.04	.03
2. Opportunity for contact with black faculty	-.01	-.01	-.02	.00	.03	.01	.00	-.03
3. Number of school activities in which participated	-.04	.00	-.04	.02	-.01	.03	-.05	.03
Conditions of Interracial Contact								
1. Ethnocentrism of same-race peers	.15	.11**	.14	.09**	.02	-.03	.04	.06
2. Ethnocentrism of other-race peers	.11	.04	.01	-.03	.11	.10*	.00	-.01
3. SES, relative to other-race peers	.06	.05	-.02	.05	.07	.04	-.03	.02
4. Grades, relative to other-race peers	-.11	-.05	-.11	.00	-.11	-.07	-.20	-.05
5. Division of own classes into interracial subgroups	-.09	-.06	-.04	-.01	-.03	-.03	.00	.00
6. Positive family racial attitudes	-.34	-.21***	-.29	-.19***	-.20	-.10**	-.12	-.06
Multiple Correlations	$R = .48$ $R^2 = .23$		$R = .44$ $R^2 = .19$		$R = .46$ $R^2 = .21$		$R = .52$ $R^2 = .27$	

Table 2. Positive Interracial Behavior, as Related to Characteristics of Students and to Amount and Conditions of Interracial Contact[a]

Characteristics of Students	A. Friendly Contact				B. Friendship Relationships			
	Blacks		Whites		Blacks		Whites	
	r	Partial Beta	r	Partial Beta	r	Partial Beta	r	Partial Beta
1. Positive opinion of other race prior to high school	.23	.10*	.22	.03	.24	.11**	.27	.12***
2. Endorsement of conventional school behavior	.08	.00	-.03	-.03	.20	.09*	.02	.00
3. Sex (high score=female)	-.11	-.06	-.03	.00	-.06	-.06	.03	.03
4. Educational Aspirations	.15	.04	.14	.03	.16	.09*	.06	.01
5. Unfriendly contacts with same-race students	.08	.09*	.14	.11***	-.01	.03	.08	.06
6. Satisfaction with life	.12	.07*	.03	.04	.07	.00	.01	.00
7. Prior preference for other school	-.11	-.04	-.02	.04	-.12	-.06	.00	.03
Contact with Other Race Outside High School								
1. Segregation of Neighborhood	-.12	-.07	.22	-.06*	-.11	-.06	-.16	-.03
2. Age of first acquaintance with other-race kids	-.20	-.13***	-.20	-.05	-.12	-.05	-.22	-.07*
3. Friendly interracial contacts in grade school	.18	.05	.28	.16***	.13	.00	.26	.10**

[a]Ns on which rs (Pearsonian correlations) are based vary somewhat depending on the number of invalid scores for each variable. The average N is about 1550 for Blacks and about 1750 for Whites. With Ns of about this size, correlations of .06 are significant at .05 level, .08 significant at .01 level, .09 at .001 level.

*Indicates Beta significant at .05 level; **indicates Beta significant at .01 level; ***indicates Beta significant at .001 level.

Table 2. (continued)

	A. Friendly Contact				B. Friendship Relations			
	Blacks		Whites		Blacks		Whites	
Opportunity for Contact in High School	r	Partial Beta	r	Partial Beta	r	Partial Beta	r	Partial Beta
1. Opportunity for interracial contact in classes	.16	.13**	.27	.18***	.19	.15***	.29	.19***
2. Opportunity for contact with black faculty	.03	.03	.16	04	.01	.02	.14	.05
3. Number of school activities in which participated	.31	.27***	.25	.21***	.17	.11**	.10	.11**
Conditions of Interracial Contact								
1. Ethnocentrism of same-race peers	-.02	-.03	-.35	-.22***	-.05	-.03	-.21	-.08*
2. Ethnocentrism of other-race peers	-.06	.01	-.05	.04	-.06	.00	-.08	-.02
3. SES, relative to other-race peers	.04	.02	.12	.00	-.01	-.02	.07	.01
4. Grades, relative to other-race peers	.05	-.07	.05	-.03	.06	-.05	-.01	-.07
5. Division of own classes into interracial subgroups	.16	.09*	.11	.04	.14	.08*	.14	.06
6. Positive family racial attitudes	.20	.12**	.21	.08*	.28	.18***	.24	.11**
Multiple Correlations	$R = .49$ $R^2 = .24$		$R = .54$ $R^2 = .30$		$R = .44$ $R^2 = .19$		$R = .46$ $R^2 = .21$	

Table 3. Positive Change in Opinion of Other Race, as Related to Characteristics of Students and to Amount and Conditions of Interracial Contact[a]

Characteristics of Students	Blacks r	Blacks Partial Beta	Whites r	Whites Partial Beta
1. Positive opinion of other race prior to high school	.06	-.04	-.04	-.17***
2. Endorsement of conventional school behavior	.23	.13**	.06	.08*
3. Sex (high score=female)	-.05	-.06	.05	.08
4. Educational Aspirations	.05	.01	-.05	-.02
5. Unfriendly contacts with same-race students	-.02	.02	.04	.07*
6. Satisfaction with life	.19	.13**	.05	.06
7. Prior preference for other school	-.13	-.09*	-.05	-.04
Contact with Other Race Outside High School				
1. Segregation of Neighborhood	.04	.02	.02	.09*
2. Age of first acquaintance with other-race kids	.06	.07	-.02	.03
3. Friendly interracial contacts in grade school	.04	-.01	.06	.05

[a] Ns on which rs (Pearsonian correlations) are based vary somewhat depending on the number of invalid scores for each variable. The average N is about 1550 for Blacks and about 1750 for Whites. With Ns of about this size, correlations of .06 are significant at .05 level, .08 at .01 level, .09 at .001 level.

*Indicates Beta significant at .05 level; **indicates Beta significant at .01 level; ***indicates Beta significant at .001 level.

Table 3. (continued)

Opportunity for Contact in High School	Blacks r	Blacks Partial Beta	Whites r	Whites Partial Beta
1. Opportunity for interracial contact in classes	.03	.00	.16	.12**
2. Opportunity for contact with black faculty	.00	-.01	.06	.03
3. Number of school activities in which participated	.00	.00	-.06	-.05
Conditions of Interracial Contact				
1. Ethnocentrism of same-race peers	-.11	-.10*	-.12	-.17***
2. Ethnocentrism of other-race peers	.00	.06	-.01	.04
3. SES, relative to other-race peers	-.03	-.05	-.06	-.09*
4. Grades, relative to other-race peers	.03	-.02	-.07	-.06
5. Division of own classes into interracial subgroups	.08	.05	.07	.02
6. Positive family racial attitudes	.25	.22***	.15	.19***
Multiple Correlations	$R = .38$ $R^2 = .14$		$R = .33$ $R^2 = .11$	

Table 4. Summary of Significant Predictors of Interracial Interaction and Opinion Change

Characteristics of Students	Avoidance		Unfriendly Contact		Friendly Contact		Friendship		Positive Opinion Change	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Positive opinion of other race prior to high school	--	---	---	-	+		++	+++		---
2. Endorsement of conventional school behavior				-			+		++	+
3. Sex (high score=female)		--	-	---						
4. Educational Aspirations							+			
5. Unfriendly contacts with same-race students	+++	+++	+++	+++	+	+++				+
6. Satisfaction with life			+		+				++	
7. Prior preference for other school		+		+					-	
Contact with Other Race Outside High School										
1. Segregation of Neighborhood			-	-		-				+
2. Age of first acquaintance with other-race kids				-	---			-		
3. Friendly interracial contacts in grade school						+++		++		

\+ or - indicates partial Beta coefficient significant at .05 level
++ or -- indicates partial Beta coefficient significant at .01 level
+++ or --- indicates partial Beta coefficients significant at .001 level

Positive or negative sign indicates direction of relationship

Table 4. (continued)

Opportunity for Contact in High School	Avoidance		Unfriendly Contact		Friendly Contact		Friendship		Positive Opinion Change	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Opportunity for interracial contact in classes					++	+++	+++	+++		++
2. Opportunity for contact with black faculty										
3. Number of school activities in which participated					+++	+++	++	++		
Conditions of Interracial Contact										
1. Ethnocentrism of same-race peers	++	++				---		-	-	---
2. Ethnocentrism of other-race peers			+							
3. SES, relative to other-race peers										-
4. Grades, relative to other-race peers										
5. Division of own classes into interracial subgroups					+		+			
6. Positive family racial attitudes	---	---	--		++	+	+++	++	+++	+++

FOOTNOTES

[1]An exception to this generalization is the study of interracial avoidance and acceptance behaviors in an integrated high school conducted by Chadwick (1972).

[2]The present analyses deal with variations in behavior and in opinion change among individual students. We have presented elsewhere evidence concerning factors related to variations in the average level of various interracial behaviors in different schools (Patchen and Davidson, 1973).

[3]Chadwick and his associates (Chadwick, 1972) have been among the few to use multivariate methods in studies of school studies although their N of black students is quite small.

[4]One study which obtained direct evidence of parents' racial attitudes and found these moderately correlated with students' racial attitudes was conducted by Hough, et al., 1969.

[5]The predictors included in these analyses do not include attitudes toward other-race schoolmates. We have presented elsewhere evidence from this study concerning the relationships between interracial perceptions and affects and interracial behavior (Patchen, Davidson, and Hofmann, 1974). Since attitudes may be considered as variables intervening between background and situational factors, on the one hand, and behavior, on the other hand, it is not appropriate to include attitudes as predictors in the same regression analyses with background and situational predictors of behavior (see Blalock, 1960:343). Additional work planned will include both attitudinal and non-attitudinal factors together in path analyses.

[6]Reasons why acceptable questionnaires were not obtained from some students in the original sample include: student absence; student schedules which did not

permit attendance at questionnaire sessions; administrative mix-up in notifying students; and evidence from our checking procedures that a questionnaire was filled out without adequate understanding of instructions or in a capricious manner. Refusals were very rare.

[6A] For Whites, of 342 correlations among nineteen predictors, the highest is .44; only four correlations are in the .40s and only three are in the .30s. Among Blacks, the highest correlation is .34; only four correlations are in the .30s.

[7] Supplementary regression analyses, in which measures of perceptions of contact conditions were substituted for objective measures, indicated that significant contributions to predicting avoidance are made by perceptions: a) that other-race students impede reaching one's own goals (true for both races); b) of higher economic status of white students (true for Whites); and c) of negative peer racial attitudes (true for Whites). No significant contributions are made by perceptions of the racial attitudes or the school status of other-race schoolmates.

[8] In this and other sections, we define best predictors as those whose Beta weights are significant at or beyond the .01 level.

[9] Supplementary regression analyses, in which measures of perceptions of contact conditions were substituted for objective measures, indicated that a small significant contribution to predicting unfriendly interaction is made by the perception that other-race students impede reaching one's own goals (for Whites). No significant contributions are made by perceptions of: a) peers' racial attitudes; b) other-race students' racial attitudes; c) relative economic status of Blacks and Whites in their school; and d) relative school status (combined academic and non-academic) of Blacks and Whites.

[10] The two measures are correlated .44 for Blacks and .48 for Whites. For correlations among other dependent variables, see Patchen and Davidson, 1973:120.

[11] Hofmann (1973) found "belief incompatibility"--a measure reflecting both same-race and other-race ethnocentrism--to be negatively related to interracial friendship among students of both races.

[12]Supplementary regression analyses, in which measures of perceptions of contact conditions were substituted for objective measures, indicate that significant contribution to predicting friendly interaction are made by perceptions of: a) positive racial attitudes of same-race peers (for Whites); and b) facilitation by other-race schoolmates of one's own goal-fulfillment (both races, especially Whites). No significant contributions to either measure of friendly interracial interaction are made by perceptions of: a) relative economic status of Blacks and Whites in school; b) relative school status (combined academic and non-academic) of Blacks and Whites; and c) racial attitudes of other-race schoolmates.

[13]Supplementary regression analysis, in which measures of perceptions of contact conditions were substituted for objective measures, indicated that, for both races, significant contributions to predicting positive opinion change are made by perceptions of: a) positive peer racial attitudes; and b) facilitation by other-race students of own goal-fulfillment. No significant contributions were made by perceptions of:a) racial attitudes of other-race schoolmates; b) relative economic status of Blacks and Whites in this school; and c) relative school status (combined academic and non-academic) of Blacks and Whites.

[14]Regression analyses reported elsewhere (Patchen, 1975) explained larger proportions of change in opinion, especially among white students. These analyses included as predictors the nature of interracial contact (friendly, unfriendly) and perceived conditions of contact, as well as other variables.

[15]The tendency for black girls to have fewer friendly interracial contacts than black boys reaches statistical significance, but is still weak, in a regression analysis using a different set of predictors (Patchen and Davidson, 1973).

[16]In another analyses of these data, focusing on the effects of variables prior to and outside high school, Brown found that, among Blacks, greater opportunity for interracial contact and less friendly interracial contact in grade school were associated with greater avoidance of Whites in high school (1974, Chapter 8).

[17]It should be noted that our measure is asymmetrical in that the status of each individual is compared to the average of the other-race group. However, the group average will affect the probability of contact with individuals of varying statuses. Moreover, some individual reactions--especially avoidance and opinion change--are at least partly directed to the other race as a group.

[18]Data from supplementary regression analyses, which include as predictors various perceived conditions of contact, indicate that, for both races, perceptions that own-race teachers favor friendly interracial contact contribute significantly to reduced unfriendly interaction and to reduced avoidance.

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